10/22/24 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Vini (@vini.barzon) Case Discussants:Ravi (@rav7ks) and John (@)

CC: General malaise and edema for 4 months

HPI:
74 yrs old F that seek medical care for back pain and intense pain in the upper limb which , started 4 months ago. Associated with edema, hearing loss. Loss of appetite, frosty urine and weight loss
The patient shows altered kidney function in outpatient setting and was referred for investigation
She denies fever .

PMH: HTA, CHF with rEF , cervical mass under investigation for 5 months , Hypothyroidism, breast cancer treated Hx of kidney dx under investigation.

Meds: Tylenol, enalapril, spironolactone, levothyroxine

Fam Hx:

Soc Hx:

Health-Related Behaviors: no alcohol, no smoking use

Allergies:

Vitals: T:nl HR: 85 **BP:120/70 RR:** nl
Exam:
Gen: Regular condition, pale, well hydrated
HEENT: CV: Pulm:
Extremities/skin: Hyperalgesia sensation in the right hand, ⅘ strength RUE, 2+ edema upper and lower limbs, non-painful

Notable Labs & Imaging:
Hematology: WBC: 3820 Hgb 5.9 , hct:21 : Plt: 44k Reticulocytes: nl
Chemistry:
Na: 130 K: 3.2 Cl: HCO3: BUN: 91 Cr:6, glucose: High, Ionized calcium high, PTH:20.6,
AST 73, ALT 22, nl bilirubin, CRP: 4, TSH: 11.19 Free T4: 1, LDH: 367, Ferritin 5,236.3
HIV Hep B negative
Imaging:
TTE:moderate enlargement of the LA, Aortic thickening and mild regurgitation, pulmonary hypertension
Unstable Vegetation in the LVOT, mitral regurgitation, Pulm HTN and patent foramen ovale
TEE: Mitral valve vegetation in the subvalvular apparatus + mitral valve annulus calcification, with mild to moderate regurgitation
Course: Penicillin + Ceftriaxone was started
Head CT: diffuse lytic bone lesions in skull
Chest CT: b/ll pleural effusion, pulmonary edema, osteodegenerative changes w/ sclerotic foci, axillary LAD
Course: Patient received 3 blood transfusions
B2-microglobulin high, Monoclonal protein in the SPEP (pos. For kappa)
BM: 38% of plasma cells

Dx: Multiple myeloma

Problem Representation:74 F p/w back pain 4 months, accompanied w/ edema; hearing loss; loss of appetite; found to have elevated ferritin and Creatinine LDH; along with mitral valve vegetation and plasma cell in BM biopsy.

Teaching Points(Parisa):
Edema→increased hydrostatic pressure/decreased oncotic pressure: hypoalbuminemia; nephrotic syndrome; protein losing enteropathy; liver disease; hypothyroidism pretibial edema; time course and duration of edema might be clue; bilateral edema usually coming from systematic issue vs unilateral coming from a vascular obstruction.
Frothy urine→ proteinuria; pseudo proteinuria; fast urine stream; dehydration; DM
Lhermitte's sign→ electrical shock sensation travels down the spine d/t demyelinating inflammatory process in spine; MS.
Hb 6 plus normal HR suggests a chronic process.
Hyperkalemia in RF → cardiac protective; shift K into cells(insulin; beta agonist) ; enhance excretion → loop diuretics; dialysis); monitor ECG; nephrology consult
AST>> ALT → hemolysis; alcohol; rhabdomyolysis
LDH hemolysis; muscle; lung (PJP PNA); hematological malignancies
Elevated Ferritin→ bacteremia; covid19; HLH cancer
Nephrotic syndrome plus lymphadenopathies → monoclonal gammopathies; HIV; granulomatosis dx
Endocarditis empiric Abx→ penicillin + ceftriaxone (gram neg rods) **Marantic endocarditis(non bacterial thrombotic endocarditis)** → malignancies; SLE(Libman sacks) ; hypercoagulable condition
Bone lytic + cytopenia + hypercalcemia → Monoclonal protein → SPEP; UPEP; immunofixation; bone marrow. Although MM is notorious; we need to think of castleman
Urine protein to creatinine protein ratio is more comprehensive than alb/cr as all urine protein are included.
Plasma cell dyscrasia→ MM; waldenstrom macroglobulinemia; light chain dx (abnormal kappa/lambda; kidney dx; Lymphadenopathies; neurological)